



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,912	06/25/2002	Toshiharu Kawasaki	0152-0593 P	2776
2292	7590	03/17/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			SANDERS, KRIELLION ANTIONETTE	
			ART UNIT	PAPER NUMBER

1714

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,912

Applicant(s)

KAWASAKI ET AL.

Examiner

Kriellion A. Sanders

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1714

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the claimed compositions wherein the arylbenzofuranone possess a carbocyclic aromatic group as R₁, it does not reasonably provide enablement for the claimed compositions wherein the arylbenzofuranone possess a heterocyclic aromatic group as R₁. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with the claims. This is because heterocyclic moieties may possess a broad range of functional characteristics, hich may substantially alter the overall performance of the arylbenzofuranone . Applicant has provided no real description of the arylbenzofuranone which possess a heterocyclic aromatic group as R₁.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 2, 4 and 6-9 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hinsken et al, US Patent No. 4,338,244.
2. Hinsken et al discloses compositions that comprise an arylbenzofuranone that correspond to those of applicant's claims and a polymer which may comprise an aromatic monovinyl

Art Unit: 1714

monomer. In specific Hinsken discloses arylbenzofuranone according to formula Ia wherein Ra may be hydrogen or a substituent of formula (aa/1). This substituent is considered to be a heterocyclic aromatic group. In formula Ia, substituent R1a may be hydrogen or phenyl.

3. If in formula Ia, Ra is hydrogen and substituent is phenyl the patented compounds are identical to applicant's claimed compounds.

4. If in formula Ia, Ra is a substituent of formula (aa/1) and substituent R1a is hydrogen The claimed compounds are stereoisomers of applicant's compounds since the substituent of formula (aa/1) is again considered to be a heterocyclic aromatic group. Hinsken discloses that the arylbenzofuranone may be incorporated into the polymers before, during or after the polymerization in an amount of from 0.1 to 5 % by weight of the polymer and are formulated into non-foamed films, which essentially are sheets. See Example D at col. 21 and claim 20. No patentable difference is readily ascertained between the present and patented inventions.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over as applied to claims 1, 2, 4 and 6-9 above, and further in view of the following statements.

Hinsken indicates that arylbenzofuranone according to formula Ia may be used to stabilize polymers comprising a monovinyl monomer, such as styrenic resins. In specific Hinsken discloses that the arylbenzofuranone may be incorporated into the polymers before, during or after the polymerization in an amount of from 0.1 to 5 % by weight of the polymer. Particulars

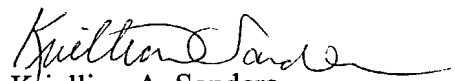
Art Unit: 1714

of the polymerization process such as devolatilization and uniform mixing procedures are well known to the art-skilled. Therefor applicant's claims 3 and 5 are also obvious over the art. Claims 7-13 are therefor obvious to the ordinary practitioner of this art. It would be obvious to cover a foamed Styrofoam container with the films of Hinsken et al. See col. 14, lines 23-65 and claim 20.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kriellion A. Sanders whose telephone number is 571-272-1122. The examiner can normally be reached on Monday through Thursday 6:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2351.


Kriellion A. Sanders
Primary Examiner
Art Unit 1714

ks
March 9, 2004